Enhancing Education Through Technology (EETT)
Competitive Sub-grant Application Assurance Sheet

Project Title: Making Connections Amount of Request: $ 75,000
District Name (Fiscal Agent for Consortiums): Salmon River Joint Number: 243
Please list the school name, and indicate whether it is a targeted school or a partner school and certify the CIPA compliance for all participating schools within the project:

Dist. # or 'P' for Private School	School Name	This school is a targeted school 'T' or a partner school 'P'.	This school is in compliance with the CIPA as outlined on page 3 of the guidance document.
243	Riggins Elementary	T (P)	(YES) NO
243	Salmon River Jr./Sr. High	(T) P	(YES) NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO

I certify that we have contacted the charter and private schools in our area about participation in this grant.

Superintendent Name Dr. Carl Morgan	E-mail morganc@jsd243.org	Telephone 208-628-3431
Signature Carl R. Morgan		
District Technology Coordinator Name Stefanie C. Brimacomb	E-mail brimacombs@jsd243.org	Telephone 208-628-3431
Signature Stefanie Brimacomb		
Project Director Name (if different than District Technology Coordinator)	E-mail	Telephone
Signature		

"Making Connections" Abstract

Joint School District #243 (JSD243) is a newly formed district in the heart of the Salmon River Canyon in Riggins, ID. With 144 students in its elementary and secondary schools, the district has set teacher professional development and educational technology improvement as the top priorities in order to meet the demanding challenges of high-stakes testing and globalization.

Because of a low student population and free-and-reduced lunch counts exceeding 90%, our schools fluctuate between school-improvement and meeting Adequate Yearly Progress (AYP) on a regular basis. We have seen Idaho Standards Achievement Test (ISAT) scores falter and eighth-grade students fail to demonstrate technological literacy as defined in the No Child Left Behind (NCLB) Act of 2001.

Other than dedicated professional-technical program classrooms at Salmon River High School, our district is limited to one computer lab at Riggins Elementary School providing a 4:1 student/computer ratio. The condition of our existing technology further limits student learning opportunities. The majority of our library and classroom computers are eight years old or older. They are incapable of delivering the demands of emerging technologies, such as faster processor speeds, increased memory/storage, and higher bandwidth capacity.

To achieve the desired level of instructional functionality, specific Internet connectivity requirements must be met using either wired or wireless connectivity configurations—or a combination of the two. In addition to Internet connectivity, equipment will have local network connectivity to facilitate shared student work which can then be displayed on an existing projection system through the teacher monitor.

The **"Making Connections"** project will utilize three 18-unit portable laptop carts and wireless technology to provide Salmon River High, Salmon River Jr. High, and Riggins Elementary School teachers and students the tools with which to further integrate technology into the curricula and instruction, and increase their ability to expand student learning. These objectives will be achieved by training the teachers to integrate powerful yet affordable technologies with their existing curriculum and equipment.

As students gain these skills in the elementary classrooms, they will increase their levels of mastery as they progress through junior high and by the end of their eighth grade year will achieve the required technological literacy eighth graders as outlined in NCLB.

Specific areas that would benefit from this project are 1) teachers will participate in relevant ongoing teacher professional development to stay abreast of current technologies; 2) students will acquire 21st century technology literacy skills and 3) overall student test scores will improve.

School improvements in core course achievement as well as keeping pace with technology advancements will have wide reaching effects beyond the classroom and school building walls. Students will be better prepared to compete in the employment market and will have skills to support business and enterprise on a local and regional level. This initiative will encourage students to see themselves as part of the current flow of technology growth and not limited and isolated by geographic and social constraints.

Our district anticipates that the mobility of laptops, teamed with existing classroom technology, will provide expanded computer access for in-class activities, support teacher training programs, and facilitate individual and group computing tasks that align with 21st century business practices.

Educational Need

JSD243 has adopted standards-based curriculum district-wide, which includes software, manipulative devices, and other technologies to enhance the curriculum. Without available student computers, JSD243 is unable to make full use of these materials.

JSD243 needs additional resources in order to provide the right tools that will maximize our students' ability to acquire high-level critical thinking skills that are required in today's computerized testing environment and demonstrate technology literacy.

The No Child Left Behind (NCLB) Act of 2001 requires each state to define academic content standards, implement statewide assessments in language arts/reading, mathematics, and science and report student performance in terms of proficiency standards. In addition, NCLB has a goal to "assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability."

Based on ISAT scores and 8th grade exit technology assessments, students at the district's secondary (7-12) levels are not achieving the goals set forth by NCLB. (Tables 1 and 2)

ISAT Scores – Percentile of Students Scoring Below Proficiency by Grade Level

Grade*	Math	Reading	Language Usage	Science
3	0%	18%	18%	na
4	12.5%	25%	12.5%	na
5	22%	22%	22%	56%
6	30%	10%	30%	50%
7	60%	50%	70%	na
8	44%	33%	44%	na
9	25%	6%	18%	37%
10	7%	7%	7%	13%

*Spring 2007 **Table 1**

8th Grade Tech Literacy

% of Students Scoring Below 80%

Component	%
Hardware	**40%**
Computer Applications	**50%**
Ethics	0%
Internet Safety	0%
Research	**60%**
Communications	0%
Advertising	0%
Virus/Spyware	0%

*2007 assessment **Table 2**

Our current student classroom computer ratio of 4:1 does not meet our district's goal of a 1:1 computer ratio. Furthermore, our child poverty rate hovers at 53% in an area where the medium average income of $20,972 brings additional challenges in meeting these standards. Over 60% of our students have no computer access at home, yet most of the assessment measures are delivered via computer.

To provide authentic assessment, students need reliable computers in the learning environment so that the tasks in their testing environment are "connected to students' lives and to their learning experiences..." and that they provide insight into "students' abilities to perform 'real world' tasks" (Darling-Hammond, *et al*, 1995). Standardized tests measure only a fraction of what students have learned, but if they are more closely related with daily classroom activity, they are more likely to reflect actual student learning.

Classroom computers facilitate the access to, and delivery of, information and reference materials that are necessary to support attaining the goals related to these themes. Teachers need the specialized training that will motivate and enable them to adapt their instruction based on student assessment results and integrate technology to enhance what they are already teaching.

The JSD243 technology plan emphasizes the belief that "well-prepared and well-supported teachers are critical to successful integration of technology in education." **Making Connections** will enable teachers to obtain extensive professional development specifically in this area and help them to broaden their existing teaching strategies with additional technology.

At the onset of the program, teachers will participate in an intensive three-day training with Harcourt's Classroom Connect use their training to teach students how to use the laptops to access reference materials, develop products appropriate to the course, and present the products to the class. In the process, students will "develop the abilities of technological design and application" and "use available technology to assist in solving problems" (Idaho Science Standards 655.01e).

While short, intensive workshops can be effective in transmitting knowledge about new classroom practices, teachers say that these workshops leave them ill-equipped to practice what they learned. Research confirms teachers' impressions. Joyce & Showers (2002) found that enactment is minimal for what is often considered high-powered teacher professional development, where presentations, discussion, demonstrations, and practice sessions are included. ***Only when classroom-based coaching is added to professional development experiences is there significant enactment.*** Once the workshop is over, continued teacher professional development will take place through Lewis-Clark State College (LCSC) and a partnership with ThereNow Consulting to provide on-going remote coaching

Funded by a multi-year grant from the U.S. Department of Education, ThereNow has demonstrated the potential efficacy of a new approach to coaching: a professional development delivery method that makes use of telepresence—enabled by carefully selected videoconferencing equipment—to connect teachers with coaches that are expert both in content and professional development strategies.

For **Making Connections** ThereNow will install two IRIS video monitoring systems in the JSD243 schools. IRIS allows teachers to invite distant observers into their classrooms via the Internet. The system includes remote-controllable web cameras, Internet 2.0 web tools, and voice-over-IP (VoIP) communication to open a virtual window into a classroom. During the observation, lRIS allows observers to watch a teacher at work and to talk to them through an earpiece. Past studies have shown that so-called 'bug-in-the-ear' communication between a teacher and an observer is helpful to both. Observers can make comments and suggestions in context. Teachers can make adjustments on the fly. After the observation period, the teacher and the remote observer can use VoIP system included with IRIS for further discussion and de-briefing.

A secure web application manages these interactions and allows the remote observer to record observation videos, make notes, and complete customized observation protocols. To use IRIS, the remote observer needs only a computer and a web browser.

Specific areas of need that we feel would benefit from this project are 1) students will acquire 21st century technology literacy skills; 2) overall student test scores will improve and 3) teachers will participate in relevant cutting-edge teacher professional development to stay abreast of current technologies.

Local Project Detail

The primary objectives of this request for mobile equipment are to:

1.Offer *all* students an equal opportunity to attain technology literacy and provide intervention for students who need supplemental instruction beyond the core curriculum by addressing the NCLB requirements.

2.Enhance student achievement by integrating technology skills into the core curriculum: Math, Science, Reading, Language Use, and Social Studies.

3.Expand the role of teachers in the classroom to facilitate technological literacy through quality professional development and training for content preparation, technology literacy and integration, effective classroom instruction, and student assessment.

4.Promote collaboration with peers, administration, and community members through creating, distributing, collecting, and assessing educational activities based on data-driven assessment goals.

5.Increase the number of teachers who integrate technology in the classroom. Provide teachers with access to a variety of instructional strategies as well as the training, tools, and materials necessary to take advantage of the Internet, software, audio/visual equipment, and an assortment of standards-based resources for the benefit of student learning as outlined in this proposal.

Measurement and Assessment

The objectives that will be assessed and measured by external evaluators from Spectrum Education Group are as follows:

1. **Students will attain technology literacy.** This objective will be measured by having teachers complete a survey that will describe how student time is spent in the classroom. At the beginning and end of the school year, the teacher will identify how student time is distributed between researching the subject, talking about the subject, demonstrating the subject and having students participating in hands-on learning activities with and without the wireless laptops.
2. **Students will gain mastery of desired concepts and skills.** This objective will be measured by: 1) an increase in the number of students taking upper level math, science, and English/literacy classes and 2) an overall increase in student technological literacy and academic achievement as measured by classroom tests, 8th-grade exit technology assessment, ISAT, ACT, and AP assessments.
3. **Teachers will participate in training sessions and remote coaching using thereNow's IRIS system that are designed to extend their teaching strategies and use of resources.** Teachers will identify new teaching strategies that they learned in training sessions and have integrated with their existing curriculum. Observations conducted by Spectrum Education Group evaluators will confirm the use of new methods in the classroom.
4. **Time spent collaborating with peers, administration, and community members to create useful lesson plans and activities will increase**. Teachers will indicate specific examples of collaboration and estimate the quality and quantity of collaboration both before this project implementation.
5. **Increase the number of teachers who integrate technology into their instruction.** This objective will be measured in two ways: 1) Teachers will complete a survey before and after the project to determine the level that they integrate technology into their instruction; 2)

observation will confirm the increased number of teachers integrating technology into their classroom practice.

6. **Time spent on in-district professional development will be consistent with the goals outlined in this proposal.** The district technology coordinator will report on the district professional development activities that directly and indirectly supported this project during the project time frame.

Time Line

April 2008	Two team-members from grant committee attend evaluation training in Boise, Idaho.
July 2008	Order and install carts, laptops, and wireless equipment.
July 2008	1st Full-day training for one teacher from each school on multimedia methods at LCSC.
September 2008	Full-day staff training led by school project leader on multimedia methods.
November 2008	Three-day training in the use of classroom computers with an emphasis on laptops in the classroom.
November 2008-2010	On-line coaching begins and continues throughout the project.
October 2008	Evaluation director and project director begin ongoing contact to facilitate interim data collection.
April 2009	All interim evaluation data collected.
June 2009	Interim report prepared in conjunction with project director.
July 2009	2nd Full-day training for one teacher from each school on multimedia methods at LCSC
September 2009	Full-day staff training led by school project leader on multimedia methods.
April 2010	All final evaluation data collected.
May 2010	Final evaluation data summarized and distributed to all grant participants.
May 2010	Evaluation discussion meeting held, all interested participants invited to attend.
June 2010	Final report written in conjunction with project director.

Evaluation: Spectrum Education Group (SEG) will serve as the external evaluator for **Making Connections**. SEG has evaluated over 80 education and public health programs across the United States funded at over $150 million. SEG evaluators—who hold advanced degrees in Research and Evaluation Methodology; Administration, Curriculum, and Instruction; and Education Leadership—have extensive experience in evaluation, assessment, measurement, administration, staff development, and teaching. They use advanced theoretical methods and technology to gather, analyze, and report vital project data.

SEG will design evaluation instruments and protocols for measuring the project objectives as outlined above. Given that the total population of the two schools included in **Making Connections** is 14 teachers and 144 students, the study will be more qualitative in nature. Although SEG will report statistics from the project, the numbers of teachers and students do not yield the statistical power needed to make statistically valid comparisons. The evaluation methodology will rely more on case studies of teachers and students, descriptions of the project, surveys, etc. Even given the constraints on quantitative results, a valid report of project outcomes can be prepared for the project objectives.

Sustainability

Making Connections will lay the groundwork to implement the curricular changes listed by the district technology and the district curriculum committees that have been approved by our Board.

Teacher training and district supported professional development will continue to focus on integrating technology into the curriculum.

Each participating school has a building technology coordinator on hand for hardware support as well as district maintenance personnel. The continual cost for consumables such as replacement batteries will be borne by the district as part of its maintenance budget. The district integration of these mobile computer labs will support the district's long-term picture of enhanced instruction for students and teachers.

The wireless installation will flow seamlessly into our long-range goals for communications and security.

A goal outlined our District Technology Plan is to "provide technology systems support" which is provided through a district technology coordinator and internal technical staff support that the district employs. The laptops and wireless systems will be maintained by private contractors and district staff at district expense.

Improving community partnerships will develop a strong base for interaction between the school and economic development efforts within the district communities. An active non-profit organization, initially supported by the Horizons Program funded by the Northwest Area Foundation is engaging in pro-active projects to improve community leadership to reduce poverty. Our independence as a district has encouraged more community involvement with the school, and with improved technology we can become a hub of these activities. Use of the new computers can extend into Continuing Education opportunities and businesses development courses for members of the communities within the district. Resources that are targeted at these efforts will facilitate on-going support for **Making Connections**.

Budget Narrative

Equipment	**Thirty-Six (36) Laptop computers** Dell Latitude D830 Laptop featuring Intel® Core™ 2 Duo T7100 (1.80GHz) 2M L2 Cache, 800Mhz Dual Core CPU; 1.0GB Memory (DDR2-667 SDRAM, 2 DIMM); GWindows® XP Professional, SP2, with media; 15.4 inch Wide Screen; 90W A/C Adapter; 24X CD-RW/DVD w/ Cyberlink PowerDVD; Wireless LAN; 80GB Hard Drive; 3Yr Gold Support Service and Complete Care	$38,140
	Three (3) 18-station wireless computer carts LAP18EULFR-GM Notebook Storage Cart stores and charges up to 18 notebook computers in individual compartments and provides room on the top shelf for a work surface or for use with printers or wireless devices.	4,435
	Twelve (12) Wireless Access Points and Installation	5,655
Professional Development	Expenses for two teachers to attend the one-day evaluation in-service in Boise including travel, per diem, substitute teachers, hotel, etc.	1,450
	Partnership with ThereNow classroom observation system and coaching	7,800
	LCSC Coaching for participating teachers	6,400
	Classroom Connect: Using Laptops in the Classroom Three-day workshop in which teachers learn how laptops can be used to facilitate learning through demonstration, simulation, sharing of student projects, research, communications, group discussion, and teacher or student presentations. Participants will learn to manage student groups; assign relevant lessons; organize student communications and projects. examined.	7,120
Evaluation	Spectrum Education Group (Logan, Utah) SEG staff comprises evaluators and professional support staff. Our evaluators hold Ph.D.s in Psychology (Research and Evaluation Methodology) and Elementary and Secondary Education.	4,000
TOTAL		**$75,000**